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09/409,305	09/29/1999	CRAIG D. ULLMAN	4967.00	5182

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EXAMINER

WILLETT, STEPHAN F

ART UNIT PAPER NUMBER

2141

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/409,305

Applicant(s)  
Ullman et al.

Examiner  
Stephan Willett

Art Unit  
2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on Sep 10, 2003

2a) ☐ This action is FINAL.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) 1, 5-8, 10-12, 16, 19, 21, 22, 24-28, 31-34, 37, 38, 43-45, 47, 4 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1, 5-8, 10-12, 16, 19, 21, 22, 24-28, 31-34, 37, 38, 43-45, 47, 48, 50 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some\* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6

6) ☐ Other:

Please reprint and  
handwrite if it doesn't  
fit.

Art Unit: 2141

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because of the informalities noted on the attached PTO 948. Correction is required.
2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1, 11, 26, 32, 106 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims state data is "shared" and "adapted" to determine content to transmit to a user which are unclear. Thus, it is assumed that data is compared to determine the content to transmit.
5. Claims 106, 130 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims state "specifying, using", "is-adapted" and "user,s" which are unclear, thus it is assumed these are typographical errors.

Art Unit: 2141

***Claim Rejections - 35 USC § 103***

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 11, 25, 27, 28, 32-34, 44, 56, 73-74, 130-131 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. with Patent Number 5,878,223 in view of Kramer et al. with Patent Number 6,327,574.

9. Regarding claim(s) 1, 11, 25, 27, 28, 32-34, 44, 56, 73-74, 130-131, Becker teaches a page finder correlated based on user profiles. Becker teaches a network to transmit content to machines, col. 4, lines 13-18. Becker teaches fields to specify machine Ids, and a machine address, col. 5, lines 18-21 as standard "handshaking" that will clearly have a user's machine address so the server can direct predicted information to a user/client. Becker teaches using

Art Unit: 2141

profiles to determine the content to send to a user, col. 4, 5, lines 54-57, 1-4 and as “the table becomes more useful, i.e. reflective of usage patterns [these are user usage patterns and are a user profile], the more the systems are used”, col. 9, lines 8-10 and a unique user, col. 11, lines 11-12, 18-20. Becker teaches a hierarchical attribute value pair type data structure that can be called a donut which is simply defined as a “data structure”, col. 9, lines 1-10 that is dynamic and changes as different data is selected by a user as further taught by “each row in the table is associated with a particular currently-active page”, col. 9, lines 13-14. “Each entry in the table represents a historical probability” col. 9, lines 14-15 that is independent of the particular pages that a particular user selects. Becker teaches comparing the above donut with a second donut type data structure to determine whether to transmit content to the machine, but not the user as comparing to chose the data with the highest probability, col. 9, lines 38-40. Becker teaches a TV and its related communication requirements, col. 3, lines 57-58 and col. 5, lines 4-9 and 18-23. Becker teaches the invention in the above claim(s) except for explicitly teaching a hierarchical attribute value pair data structure . In that Becker operates to generate user based documents, the artisan would have looked to the network data structure arts for details of implementing user matching. In that art, Kramer, a related network system, teaches “the consumer profile includes hierarchical attribute vectors which encode attributes of a consumer at progressively higher levels of abstraction”, abstract, lines 14-16. Kramer specifically teaches “annotating or replacing ... other media with (possibly) related multimedia content”, col. 6, lines 22-24 and “the characteristic value for an object will be represented as a vector [hierarchy]”, etc., col. 11, lines 1-5 . Further, Kramer suggests the “TIC to construct the personal database and

Art Unit: 2141

models of the consumer”, col. 5, lines 31-32 which will result from implementing his hierarchical attribute value (HAV) pair type data structures. The motivation to incorporate specifically a HAV or donut insures highly related multimedia data is matched with a user. Thus, it would have been obvious to one of ordinary skill in the art to incorporate said data structures as taught in Kramer into network system described in Becker because Becker operates with finding data in a computer network related to a user and Kramer suggests that better matching techniques can be obtained in networks. Therefore, by the above rational, the above claims are rejected.

10. Claims 1, 5-8, 10-12, 16, 19, 21, 22, 24-28, 31-34, 37-38, 43-45, 47-48, 53-56, 73-77, 81-84, 105-108, 112, 117-121, 126, 128, 130, 131 and 133-135 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. with Patent Number 5,878,223 in view of Savitzky et al. with Patent Number 6,012,083.

11. Regarding claim(s) 1, 11, 25, 27, 28, 32-34, 44, 56, 73-74, 130-131, Becker teaches a page finder correlated based on user profiles. Becker teaches a network to transmit content to machines, col. 4, lines 13-18. Becker teaches fields to specify machine Ids, and a machine address, col. 5, lines 18-21 as standard “handshaking” that will clearly have a user’s machine address so the server can direct predicted information to a user/client. Becker teaches using profile type data to determine the content to send to a user, col. 4, 5, lines 54-57, 1-4 and as “the table becomes more useful, i.e. reflective of usage patterns [these are user usage patterns and are a user profile], the more the systems are used”, col. 9, lines 8-10 and a unique user, col. 11, lines 11-12, 18-20. Becker teaches a hierarchical attribute value pair type data structure that can be

Art Unit: 2141

called a donut which is simply defined as a “data structure”, col. 9, lines 1-10 that is dynamic and changes as different data is selected by a user as further taught by “each row in the table is associated with a particular currently-active page”, col. 9, lines 13-14. “Each entry in the table represents a historical probability” col. 9, lines 14-15 that is independent of the particular pages that a particular user selects. Becker teaches comparing the above donut with a second donut type data structure to determine whether to transmit content to the machine, but not the user as comparing to chose the data with the highest probability, col. 9, lines 38-40. Becker teaches a TV and its related communication requirements, col. 3, lines 57-58 and col. 5, lines 4-9 and 18-23. Becker teaches the invention in the above claim(s) except for explicitly teaching details that makeup a user-profile. In that Becker operates to generate user based documents, the artisan would have looked to the network arts for details of implementing user selections. In that art, Savitzky, a related network system, teaches “a web server to transform the requests from the Web client”, abstract, lines 2-3. Savitzky specifically teaches that a “feature calculator generates a feature list for a transaction by scanning the data element”, col. 6, lines 37-39 based on the user’s requests, “additional features can be added at any time to the features calculator’s known features”, col. 6, lines 53-54 to highlight the data is independent of the calculated hierarchy, and an agent “modifies them according to filtering rules before documents are returned to a client”, col. 11, lines 32-34 which also reads on a hierarchical attribute value data pair data structure . Further, Savitzky suggests that “the user typically accesses agency 10 by some action taken with a Web client to access to a Web server”, col. 5, lines 1-3 will result from implementing his network system. The motivation to incorporate a user profile insures highly related documents

Art Unit: 2141

are matched with a user. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the user profile as taught in Savitzky into network system described in Becker because Becker operates with finding documents in a computer network and Savitzky suggests that optimization can be obtained with networks. Therefore, by the above rational, the above claims are rejected.

12. Regarding claims 12, 19, 21, 24, Savitzky teaches attributes of a user, col. 6, lines 55-60 and preferences of a user, col. 11, lines 29-30 with relevant hierarchies, col. 20, lines 65-66 via queries, col. 21, lines 8-9, but Becker clearly queries users, col. 5, lines 13-15. Thus, the above claim limitations are obvious in view of the combination.

13. Regarding claims 5, 6, 16, Savitzky teaches the medium to include chat rooms, users, or services as the various type of agent services available, col. 6, lines 65-66. Thus, the above claim limitations are obvious in view of the combination.

14. Regarding claims 7, Savitzky teaches directory for routing content, col. 6, lines 57-59. Thus, the above claim limitations are obvious in view of the combination.

15. Regarding claims 8, 26, 31, 37, 45, 54, 75, 76, 118, 120, 135, Becker teaches transmitting selected information, col. 5, lines 50-53. Thus, the above claim limitations are obvious in view of the combination.

16. Regarding claims 22, 38, 43, 47, 48, 53, 55, 77, 81-84, 117, 119, 121, 126, 128, 133-134, Savitzky teaches monitoring the activities of a user, col. 11, lines 28-29 and Becker teaches updating user profiles, col. 9, lines 24-25. Thus, the above claim limitations are obvious in view of the combination.



Art Unit: 2141

***Response to Amendment***

17. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected. The “the hierarchical attribute value data pair data structure” as defined is still a very broad and open to interpretation such as a hierarchy of data with data points related or connected to one or another (paired) based on some relationship.

18. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant’s arguments can not be held as persuasive regarding patentability.

19. Applicant suggests “the efficient targeting of user’s with content”, Paper No. 21, Page 18, lines 22-23 “enable certain beneficial results to occur”. This is verbatim what the cited references teach. The applicant’s new representative was called to clarify the meaning of the claimed language since the specification does not provide further detail, however, no timely response was made, thus the new rejection above is relied to respond to each argument presented. Thus, Applicant’s arguments can not be held as persuasive regarding patentability.

20. Applicant suggests “the probabilities in the ‘prediction tables’ are essentially user-profile information”, Paper No. 21, Page 20, line 17 and “the individual value pairs may be shared by different data structure hierarchies to define different entities, e..g. an individual or a group of individuals sharing the same piece of information”, Paper No. 11, page 9, lines 1-2. Correct and this is only one of many profile type information. Ironically, the group of ratings for a particular page “share the same piece of information” and use it independently depending on the user’s current page selection. A profile could be as simple as a “currently-active page”, col. 9, lines 13-

Art Unit: 2141

14 in Becker. Also, Savitzky teaches an agent “modifies them according to filtering rules before documents are returned to a client”, col. 11, lines 32-34. Said rules read on a “hierarchical attribute value pair data structure” as claimed as understood based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. The data is independent of the hierarchical structure even though said data can also have a relation to the hierarchical attribute value pair data structure, but is shown as “additional features can be added at any time to the features calculator’s known features”, Savitzky, col. 6, lines 53-54. Applicant suggests “features are added to the feature calculator and not to the feature list”, Paper No. 21, Page 25, lines 10-11. Such a limited interpretation is not reasonable based on the teachings since either feature data structure can be used as the user’s profile based on the particular user’s transaction being resolved. A transaction is directly related to a user. Thus, Applicant’s arguments can not be held as persuasive regarding patentability.

Art Unit: 2141

*Conclusion*

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited. A close review of the references is suggested, i.e. EP 1 089 201 A1. The other references cited teach numerous other ways to perform matching of content based on a user's profile, particularly with chat rooms, i.e. 6,513,069, thus a close review of them is suggested.


22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (703) 305-4003. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

24. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605.

sfw

December 11, 2003

  
**RUPAL DHARIA**  
**SUPERVISORY PATENT EXAMINER**